AMENDMENT AND RESPONSE UNDER 37 CFR § 1.116 – EXPEDITED PROCEDURE

Serial Number: 09/800366

t t

Filing Date: March 6, 2001

Title:

IMPROVED BOLOMETER OPERATION USING FAST SCANNING

Page 2 Dkt: 256.087US1

IN THE SPECIFICATION

Please amend the specification as follows.

The paragraph beginning on page 8, line 14 as previously amended, is amended as follows:

Graph 500 also illustrates temperature variation in each microbolometer caused by the application of two or more bias pulses 510. It can be seen that the temperature variation of each microbolometer in the array 110 in each frame time 410 is significantly reduced by the fast scanning technique of the present invention (by applying a series of two or more bias pulses within the frame time 410). This is because the heating effect of shorter bias pulses is less each bias pulse is reduced by the number of bias pulses applied within the frame time. Also, due to the application of a series of two or more bias pulses 510, the time duration 520 between each bias pulse 510 is shorter than the time duration 470 between bias pulses shown in Figure 4. This shorter time duration 520 between two or more bias pulses 510 allows less time for cooling to occur, thereby keeping the temperature variation to a minimum 530 as shown in Figure 5.)